

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/IB2004/003365

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M8/02 H01M8/04 H01M8/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/077487 A1 (ROBERTS JOY A ET AL) 24 April 2003 (2003-04-24) page 5, paragraph 60 - paragraph 63; figure 3	1,2,6-9, 11,13
Y	US 5 441 821 A (MERRITT ET AL) 15 August 1995 (1995-08-15) column 7, line 12 - column 8, line 54; figure 1	1,2,9,13
Y	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 12, 25 December 1997 (1997-12-25) & JP 09 209810 A (FUJI HEAVY IND LTD), 12 August 1997 (1997-08-12) abstract	1,6,9,13
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

21 February 2005

Date of mailing of the international search report

07/03/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3 748 180 A (CLAUSI J,US ET AL) 24 July 1973 (1973-07-24) column 1, line 50 - column 2, line 66 column 3, line 50 - line 64; figure 1 -----	1,6-9,13
Y	EP 1 223 631 A (GENERAL MOTORS CORPORATION) 17 July 2002 (2002-07-17) claims 1-9; figures 2,3 -----	11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/003365

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003077487 A1	24-04-2003	US 6479177 B1 US 5798186 A AU 7396700 A WO 0124296 A1 CA 2384863 A1 EP 1222704 A1 JP 2003510786 T US 2002009623 A1 US 2001055707 A1 AU 2947397 A CA 2257302 A1 WO 9748142 A1 GB 2330686 A ,B JP 2000512068 T	12-11-2002 25-08-1998 30-04-2001 05-04-2001 05-04-2001 17-07-2002 18-03-2003 24-01-2002 27-12-2001 07-01-1998 18-12-1997 18-12-1997 28-04-1999 12-09-2000
US 5441821 A	15-08-1995	AU 699082 B2 AU 4294696 A CA 2206588 A1 WO 9620508 A1 DE 69515132 D1 DE 69515132 T2 EP 0800708 A1 JP 10511497 T	19-11-1998 19-07-1996 04-07-1996 04-07-1996 23-03-2000 20-07-2000 15-10-1997 04-11-1998
JP 09209810 A	12-08-1997	NONE	
US 3748180 A	24-07-1973	NONE	
EP 1223631 A	17-07-2002	US 2002094460 A1 CA 2361105 A1 DE 60101893 D1 EP 1223631 A2 JP 2002216825 A	18-07-2002 08-07-2002 04-03-2004 17-07-2002 02-08-2002